

REMARKS

Claims 70-75 and 79-82 are all of the claims pending in the application.

I. Claim Rejections under 35 U.S.C. § 102(e)

The Examiner withdrew the previous rejections of claims 70-75 and 79-82, however the claims are now rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,650,905 to Toskala et al. (hereinafter “Toskala”).

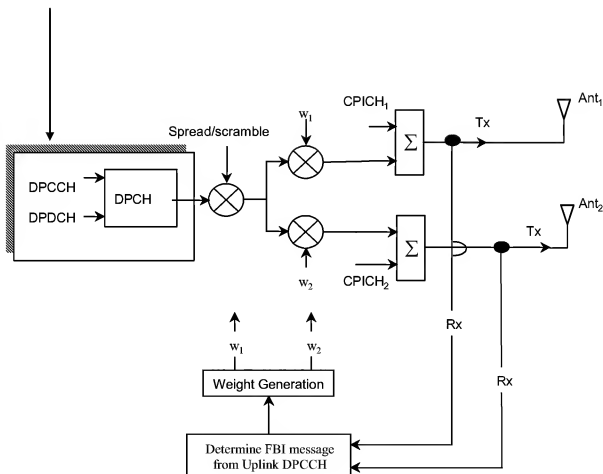
Applicant respectfully traverses this rejection and respectfully requests that the Examiner reconsider the rejection at least in view of the following comments.

1. Toskala does not disclose controlling reception quality of a transmission power control signal sent only from the packet transmission base station

Claim 70 recites, *inter alia*, “controlling a reception quality of a transmission power control signal included in a downlink dedicated channel sent only from the packet transmission base station, by controlling a target SIR.” Applicant respectfully submits that Toskala does not disclose or fairly suggest this feature.

The Examiner points to disclosure in Toskala related to non-selected cells switching off the transmission power of the dedicated physical data channel (DPDCH) and also notes that according to Toskala, the transmission power level used for the dedicated physical control channel (DPCCH) is managed/updated using ordinary transmit power control methods, wherein the ordinary transmit power control methods include detecting a SIR and sending transmit power control (TPC) commands from the mobile station to adjust the power levels accordingly (*see* page 4 of the Office Action).

Applicant respectfully submits that the Examiner appears to misinterpret the teachings of Toskala. The Toskala reference discloses a procedure to control a transmission power of a dedicated physical channel (DPCH). The dedicated physical channel (DPCH) includes both a dedicated physical data channel (DPDCH) and a dedicated physical control channel (DPCCH), as shown in the figure below, which is reproduced from 3G technical specification 25.214 Version 3.1.1, FIG. 6, page 25¹.



¹ Available at http://www.3gpp.org/ftp/Specs/archive/25_series/25.214/25214-311.zip

More specifically, Toskala describes the transmission power control of the dedicated physical channel (DPCH) under the site selection diversity transmit (SSDT) power control technique (*see* col. 10, lines 18-57 of Toskala). The SSDT power control corresponds to a transmission power control method in a soft handover. The user equipment (UE) (*e.g.*, a mobile terminal) selects one primary base station from the base stations within the soft handover state. The base stations which are not selected are defined as non-primary base stations. *See* col. 10, lines 18-30 of Toskala.

In SSDT power control, the non-primary base control station switches off its data channel (DPDCH) to reduce interference between the primary and non-primary base stations (*see* col. 10, lines 26-30 of Toskala). The control channel (DPCCH), however, is still transmitted by both the primary and non-primary base stations (*see* col. 10, lines 34-39 of Toskala). Since the control channel (DPCCH) is transmitted by both the primary and non-primary base stations, the dedicated physical channel (DPCH) which includes the control channel (DPCCH) is still transmitted by both the primary and non-primary base stations as well, even though the data channel (DPDCH) is switched off by the non-primary base station. Thus, in the system according to Toskala, a downlink dedicated channel (*i.e.*, the DPCH) is sent from both the packet transmission (primary) base station and the non-primary base station.

According to Toskala, the transmission power of the control channel (DPCCH) is updated by an ordinary transmit power control method, regardless of whether the base station is primary or non-primary (*see* col. 10, lines 34-39 of Toskala).

Toskala discloses that in the ordinary transmit power control, the transmission power of the dedicated physical channel (DPCH) is set according to an inner loop power control (*see* col. 3, lines 44-46 of Toskala). In the inner loop power control, if a quality estimate of the control channel (DPCCH) (*e.g.*, SIR of DPCCH) is greater than a target quality (*e.g.*, target SIR), then a “down” TPC command is generated to decrease the transmission power of the dedicated physical channel (DPCH). On the other hand, if the quality estimate of the control channel (DPCCH) is less than the target, then an “up” TPC command is generated to increase the transmission power of the dedicated physical channel (DPCH). *See* col. 3, line 65 through col. 4, line 17 of Toskala.

In the system according to Toskala, the dedicated physical channel (DPCH) sent from the packet transmission (primary) base station and the non-primary base station are combined in the mobile terminal (*see* col. 2, lines 19-22 of Toskala). Thus, the inner loop power control described above sets the transmission power of the dedicated physical channel (DPCH) according to the combined dedicated physical channels (DPCHs) sent from the packet transmission (primary) base station and the non-primary base station.

Accordingly, Toskala does not disclose or fairly suggest “controlling a reception quality of a transmission power control signal [...] sent only from the packet transmission base station,” as recited in claim 70. Instead, in the system according to Toskala, the reception quality of the combined dedicated physical channels (DPCHs) (rather than the TPC signal) sent from the primary and non-primary base stations (rather than only the primary base station) is controlled.

2. Toskala does not disclose a dedicated physical channel (DPCH) being transmitted only from the packet transmission base station

As discussed above, Toskala discloses that the data channel (DPDCH) of the dedicated physical channel (DPCH) is switched off at the non-primary base station (*see* col. 10, lines 25-30 of Toskala). However, in Toskala, the dedicated physical channel (DPCH) itself is not switched off since Toskala clearly describes that the control channel (DPCCH), which is part of the dedicated physical channel (DPCH) (as shown in the figure above), is kept alive regardless of the selected state (*see* col. 10, lines 33-39 of Toskala). That is, according to Toskala, the dedicated physical channel (DPCH) is not only sent from the primary base station but also from the non-primary base station. Thus, Toskala does not teach or fairly suggest “a downlink dedicated channel sent only from the packet transmission base station,” as recited in claim 70.

3. Toskala does not disclose a TPC signal included in a dedicated channel sent only from the packet transmission base station

According to Toskala, TPC commands are sent on the control channel (DPCCH) (*see* col. 4, lines 2-3 of Toskala). As discussed above, in the system according to Toskala, the control channel (DPCCH) is kept alive regardless of the selected state (*i.e.*, the control channels (DPCCHs) from both the primary and non-primary base stations are kept alive). In other words, in Toskala, the TPC commands are sent not only from the primary (packet transmission) base station but also from the non-primary base station. Applicant thus respectfully submits that Toskala does not teach or fairly suggest “a transmission power control signal included in a downlink dedicated channel sent only from the packet transmission base station.”

At least for these reasons, Applicant respectfully submits that claim 70 is patentable over Toskala.

Applicant respectfully notes that claims 72, 74, 79, and 81 recite features similar to, although not necessarily coextensive with, the features discussed above with respect to claim 70. Accordingly, Applicant respectfully submits that claims 72, 74, 79, and 81 are patentable over Toskala at least for the reasons discussed above with respect to claim 70.

Applicant respectfully submits that claims 71, 73, 75, 80, and 82 are patentable over Toskala at least by virtue of their dependency on claims 70, 72, 74, 79, and 81.

II. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

RESPONSE UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 10/509,867

Attorney Docket No.: Q83996

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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